

Claims

We claim:

1. A method of regulating usage in a smart card system, the method
5 comprising the steps of:
 - at a card acceptance location:
 - detecting a presence of a smart card;
 - determining an identification code of the smart card;
 - checking the identification code against a list stored locally at the card
- 10 acceptance location, wherein the list is received from a second device; and
 - if the identification code of the smart card is listed on the list, performing
 - an action on the smart card.
2. The method of claim 1 wherein the action is selected from a group
- 15 consisting of disabling the smart card, enabling the smart card, and modifying a
parameter to the smart card.
3. The method of claim 1 wherein the smart card has a status bit, and wherein
the action performed is disabling the smart card that comprises at least one of the
- 20 steps of:
 - changing the status bit in the smart card to indicate disabled; and
 - blocking an area of memory located within the smart card.
4. The method of claim 1 wherein the smart card has a status bit, and wherein
- 25 the action performed is enabling the smart card that comprises at least one of the
following steps:
 - changing the status bit in the smart card to indicate enabled; and
 - unblocking an area of memory located within the smart card.

5. The method of claim 4 further comprising the step of determining if the smart card was previously disabled before the step of checking the identification code against a list stored locally at the card acceptance location.

5 6. The method of claim 5 wherein the step of checking the identification code against a list stored locally at the card acceptance location is performed only if the smart card was determined to be previously disabled.

7. The method of claim 1 further comprising the step of, only after the step of performing is completed, transmitting a request to the second device to purge the identification code of the smart card that the action was performed on from the list.

8. The method of claim 1 wherein the action performed is modifying a parameter to the smart card which indicates one of the following: a discount, a rebate, a free purchase, and a free fare.

9. The method of claim 8 wherein the parameter is based on at least one of the following: a validity period of a concession, a type of concession, a loyalty program, a validity period of a loyalty program, accrued loyalty points, a birth date, financial status, cardholder service area, cardholder purchase level, cardholder usage level, a set of criteria set by a service provider, a set of criteria set by a system owner, and a set of criteria set by a system operator.

10. The method of claim 1 wherein the list comprises identification codes of smart cards that are selected from a group consisting of: smart cards deemed ineligible to participate in the smart card system; smart cards that were previously denied access to participate in the smart card system but are currently deemed eligible to participate in the smart card system; and smart cards that require a concession update.

11. The method of claim 1 wherein the smart card has a status bit and a blocking status, and further comprising the steps of:

5 determining whether the status bit and the blocking status are consistent, wherein the status bit and the blocking status are consistent in one of the following events: when the status bit is enabled and the blocking status is unblocked, and when the status bit is disabled and the blocking status is blocked; and
10 if the status bit and the blocking status are inconsistent, disabling the smart card.

12. A method of regulating smart card usage in a smart card system, the method comprising the steps of:

15 compiling a first list of smart cards; transmitting the first list to a set of card acceptance locations, wherein the first list is stored locally at each card acceptance location in the set; receiving a second list of smart cards from each card acceptance location in the set, wherein the card acceptance location has performed an action on each smart card listed on its respective second list;
20 if the smart card is listed on the second list and the first list, purging the smart card from the first list; and if the smart card is listed on the second list but is not listed on the first list, adding the smart card to the first list.

25 13. The method of claim 12 wherein the smart cards listed on the first list are selected from a group consisting of: smart card deemed ineligible to participate in the smart card system; smart card that were previously ineligible to participate in the smart card system, but have been currently deemed eligible to participate in the smart card system; and smart cards that require a concession update.

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14. The method of claim 12 further comprising the steps of:
updating the first list; and
transmitting the updated first list to the set of card acceptance locations.
- 5 15. The method of claim 12 further comprising the step of receiving an
acknowledgement that the set of card acceptance locations successfully received
the first list.
16. The method of claim 15 further comprising retransmitting the first list to
10 the set of card acceptance locations if the acknowledgement was not received.
17. The method of claim 12 wherein the set of card acceptance locations are in
a given geographical area.
- 15 18. The method of claim 12 wherein the set of card acceptance locations are
mapped to a given service provider.
19. The method of claim 12 further comprising the steps of reducing the first
list of smart cards in size by at least one of the following criteria:
20 compiling the first list based on a given geographic location of the card
acceptance locations;
compiling the first list based on smart cards having at least a given
monetary value associated therewith;
compiling the first list based on smart cards having at least a given
25 monetary value contained thereon;
compiling the first list based on a potential fraud value;
compiling the first list based on recent attempts to use a disabled smart
card; and
compiling the first list based on a size of available memory at a card
30 acceptance location.

